

## SECTION 1 – IDENTIFICATION

### 1.1 Product Identifier:

Product No: KIT-9041-50  
 Product Name: PrimeWay Plasmid II DNA Extraction Kit, 50 preps

#### Other means of identification:

See section 3 or

A registration number for the substance(s) does not exist because the annual tonnage does not require registration or the substance or its use is excluded from registration.

*1 x 15 mL pD1 Buffer  
 1 x 15 mL pD2 Buffer  
 1 x 20 mL pD3 Buffer  
 1 x 16 mL Wash Buffer A1  
 1 x 8 mL Wash Buffer A2  
 1 x 5.5 mL Elution Buffer  
 1 x 260 µL RNase A*

### 1.2 Recommended use of the chemical and restrictions on use:

To isolate and purify plasmid DNA from bacterial culture.  
 For R&D use only. Not for pharmaceutical, household, or other uses.

### 1.3 Supplier Information:

**Axil Scientific Pte Ltd**  
 2 Tukang Innovation Grove,  
 06-01 JTC MedTech Hub,  
 Singapore 618305

Tel: +65 6775 7318

Email: [custcare@axilscientific.com](mailto:custcare@axilscientific.com)

**Apical Scientific Sdn Bhd**  
 No. 17, Jalan BS 7/1C,  
 Taman Perindustrian Bukit Serdang (BS7),  
 Seri Kembangan 43300  
 Selangor Darul Ehsan, Malaysia

Tel: +603 8943 3252

Fax: +603 8943 3243

Email: [custcare@apicalscientific.com](mailto:custcare@apicalscientific.com)

### 1.4 Emergency phone number:

Monday – Friday, (UTC +8:00) 8:00 a.m. to 6:00 p.m.  
 +65 6775 7318 (Singapore)  
 +603 8943 3252 (Malaysia & Other Countries)

## SECTION 2 – HAZARDS IDENTIFICATION

### 2.0 GHS Classification of Complete Product



Signal word

WARNING

#### Hazard Identification

H302  
 H315  
 H319  
 H335

#### Hazard Classification; Hazard Statement

Acute Tox. 4 oral; Harmful if swallowed.  
 Skin Irrit. 2; Causes skin irritation.  
 Eye Irrit. 2; Causes eye irritation.  
 Acute Tox. 3; May cause respiratory irritation.

## 2.1 GHS Classification of the Substance or Mixture

### 15 mL pD1 Buffer

Do not need labelling as hazardous

Signal word

-

No hazard class

### 15 mL pD2 Buffer



Signal word

WARNING

#### Hazard Identification

H315  
H319

#### Hazard Classification; Hazard Statement

Skin Irrit. 2; Causes skin irritation.  
Eye Irrit. 2; Causes eye irritation.

### 20 mL pD3 Buffer



Signal word

WARNING

#### Hazard Identification

H302  
H319

#### Hazard Classification; Hazard Statement

Acute Tox. 4 oral; Harmful if swallowed.  
Eye Irrit. 2; Causes eye irritation.

### 16 mL Wash Buffer A1



Signal word

WARNING

#### Hazard Identification

H302  
H319

#### Hazard Classification

Acute Tox. 4 oral; Harmful if swallowed.  
Eye Irrit. 2; Causes eye irritation.

### 8 mL Wash Buffer A2

Do not need labelling as hazardous

Signal word

-

No hazard class

### 5.5 mL Elution Buffer

Do not need labelling as hazardous

Signal word -

No hazard class

## 260 µL RNase A



Signal word

DANGER

### Hazard Identification

H314

H315

H319

H335

### Hazard Classification; Hazard Statement

Skin Corr. 1A-1C; Causes severe skin burns and eye damage

Skin Irrit. 2; Causes skin irritation.

Eye Irrit. 2; Causes serious eye irritation.

Acute Tox. 3; May cause respiratory irritation.

## 2.2 Label Elements, including precautionary statements

### 15 mL pD1 Buffer

Do not need labelling as hazardous.

Signal word: -

### 15 mL pD2 Buffer



Signal word: WARNING

### 20 mL pD3 Buffer



Signal word: WARNING

### 16 mL Wash Buffer A1



Signal word: WARNING

### 8 mL Wash Buffer A2

Do not need labelling as hazardous.

Signal word: -

### 5.5 mL Elution Buffer

Do not need labelling as hazardous.

Signal word: -

## 260 µL RNase A



Signal word: DANGER

### Precautionary statement(s): -

#### Prevention

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264 Wash skin thoroughly after handling.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

#### Response

- P301 + P312 If swallowed: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.  
+ P330  
P302 + P352 If on skin: Wash with plenty of soap and water.  
P304 + P340 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P362 Take off contaminated clothing and wash before reuse.

### 2.3 Other hazards

#### Possible hazards from physicochemical properties

In the case of pH values are less than 5 or higher than 9 then it is irritant.

#### Information pertaining to particular risks to human and possible symptoms

This mixture has not been tested to determine the overall health hazard.

#### Information pertaining to particular risks to the environment

No data available.

#### Other hazards:

No additional data available.

## SECTION 3 – COMPOSITION/ INFORMATION ON INGREDIENTS THAT CONTRIBUTING TO HAZARD

### 3.1 Substances or 3.2 Mixtures

#### 15 mL pD1 Buffer

Chemical: Sodium Dodecyl Sulfate CAS No.: 151-21-3  
GHS Classification: H228, Flam. Sol. 1, H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H318, Eye Dam. 1, H332, Acute Tox. 4 inh., H335, STOT SE 3, H412, Aquatic Chronic 3  
Formula: C<sub>12</sub> H<sub>25</sub> OSO<sub>2</sub> Na  
Pseudonym: Lauryl Sulfate Sodium Salt  
EC No.: 205-788-1  
Concentration: ≤ 0.5%  
acc. CLP (GHS): The criteria for classification are not fulfilled.

#### 15 mL pD2 Buffer

Chemical: Sodium Dodecyl Sulfate CAS No.: 151-21-3  
GHS Classification: H228, Flam. Sol. 1, H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H318, Eye Dam. 1, H332, Acute Tox. 4 inh., H335, STOT SE 3, H412, Aquatic Chronic 3  
Formula: C<sub>12</sub> H<sub>25</sub> OSO<sub>2</sub> Na  
Pseudonym: Lauryl Sulfate Sodium Salt

EC No.: 205-788-1  
 Concentration: ≤ 0.5%  
 acc. CLP (GHS): The criteria for classification are not fulfilled.

Chemical: Sodium Hydroxide CAS No.: 1310-73-2  
 GHS Classification: H314, Skin Corr. 1B  
 Formula: NaOH. H<sub>2</sub>O  
 Pseudonym: Caustic Soda  
 EC No.: 215-185-5  
 Concentration: ≤ 0.5%  
 acc. CLP (GHS): H315, Skin Irrit. 2, H319, Eye Irrit. 2

### 20 mL pD3 Buffer

Chemical: Guanidine Hydrochloride CAS No.: 50-01-1  
 GHS Classification: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2  
 Formula: CH<sub>6</sub> ClN<sub>3</sub>  
 Pseudonym: Guanidinium Chloride  
 EC No.: 200-002-3  
 Concentration: 30 – 60%  
 acc. CLP (GHS): H302, Acute Tox. 4 oral, H319, Eye Irrit. 2

### 16 mL Wash Buffer A1

Chemical: Guanidine Hydrochloride CAS No.: 50-01-1  
 GHS Classification: H302, Acute Tox. 4 oral, H315, Skin Irrit. 2, H319, Eye Irrit. 2  
 Formula: CH<sub>6</sub> ClN<sub>3</sub>  
 Pseudonym: Guanidinium Chloride  
 EC No.: 200-002-3  
 Concentration: 30 – 60%  
 acc. CLP (GHS): H302, Acute Tox. 4 oral, H319, Eye Irrit. 2

### 8 mL Wash Buffer A2

No component or ingredient is contributing to hazard.

### 5.5 mL Elution Buffer

No component or ingredient is contributing to hazard.

### 260 µL RNase A

Chemical: Ribonuclease A CAS No.: 9001-99-4  
 GHS Classification: H315, Skin Irrit. 2; H319, Eye Irrit. 2; H335, Acute Tox. 3  
 EC No.: 3.1.27.5, origin: Bovine pancreas  
 acc. CLP (GHS): H315, Skin Irrit. 2; H319, Eye Irrit. 2; H335, Acute Tox. 3

## 3.3 Remarks

Components of mixture that are not listed are not hazardous to health or the environment within the meaning of GHS, and/or are present below their cut-off levels.

## SECTION 4 – FIRST-AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### Eye Contact

Rinse cautiously with plenty of water. Remove contact lenses. Continue rinsing for at least 15 minutes and consult a physician.

**Skin Contact**

Rinse skin with soap and plenty of water. Remove contaminated clothing/ shoes and consult a physician.

**Inhalation**

Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.

**Ingestion**

Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

**4.2 Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.3) and/or in section 11.

**4.3 Indication of any immediate medical attention and special treatment needed**

No data available.

**SECTION 5 – FIRE-FIGHTING MEASURES****5.1 Extinguishing Media****Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special Exposure Hazards**

Carbon oxides, Nitrogen oxides (NO<sub>x</sub>)

**5.3 Special Fire-fighting Procedures**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**5.4 Further Information**

The product itself does not burn.

**SECTION 6 – ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment, and emergency procedures**

Regular staff training is necessary, indicating hazards and precautions about the basis of operating instructions. Restrictions on activity must be observed. Wear protective gloves, protective clothing, and eye/face protection. Observe general safety guidelines for protection; avoid eye and skin contact.

**6.2 Environmental precautions**

Contain spill to prevent migration. Do not allow the undiluted product to enter sewers/surface or ground water. Dispose of contents/container in accordance with local regulations.

**6.3 Methods and material for containment and cleaning up**

Bind any escaping liquid with inert absorbent. And dispose chemicals or excess reagents in accordance to local regulations for hazardous chemicals. Clean any contaminated equipment and floors with plenty of water. Collect small amounts of leaked liquid and flush with water into drains.

**6.4 Reference to other sections**

Nil.

## SECTION 7 – HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product. Use only in well-ventilated working areas.

### 7.2 Conditions for safe storage, including any incompatibilities.

The original product package allows a safe storage. To maintain product quality, store according to the instructions in the product labelling.

#### 7.2.1 Requirements for stock rooms and containers

Keep original product packages tightly closed during handling and storage.

### 7.3 Specific end use(s)

Product for research use.

## SECTION 8 – EXPOSURE CONTROLS/ PERSONAL PROTECTION

### 8.1 Control parameters

#### 15 mL pD1 Buffer

This component is not known to contain any substances with occupational exposure limit values.

#### 15 mL pD2 Buffer

This component is not known to contain any substances with occupational exposure limit values.

#### 20 mL pD3 Buffer

This component is not known to contain any substances with occupational exposure limit values.

#### 16 mL Wash Buffer A1

This component is not known to contain any substances with occupational exposure limit values.

#### 8 mL Wash Buffer A2

This component is not known to contain any substances with occupational exposure limit values.

#### 5.5 mL Elution Buffer

This component is not known to contain any substances with occupational exposure limit values.

#### 260 µL RNase A

This component is not known to contain any substances with occupational exposure limit values.

### 8.2 Exposure controls

Good ventilation and extraction system in the room, floor resistant to chemicals with floor drainage and washing facilities. High level of cleanliness shall be maintained at the workplace.

#### 8.2.1 Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts is desired, use type N95 (US) or type P1 (EN 143) dust masks.

#### 8.2.2 Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### 8.2.3 Eye/ face protection

Use safety glasses. Where contact with the eyes is likely, use chemical safety goggles.

## 8.2.4 Skin protection

Recommended to avoid contamination with these hazards.

## 8.2.5 Personal hygiene

Eating, drinking, smoking, taking snuff and storage of food in work areas and at outdoor workplaces is prohibited. Avoid contact with the skin, eyes and clothing. Rinse any clothing on which the substance has been spilled and soak it in water. Wash hands thoroughly with soap and water when stopping work and before eating, and then apply protective skin cream.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### 15 mL pD1 Buffer

Appearance: Liquid  
pH: 7.5 to 8.0 (Neat, 25 °C)

Colour: Colourless

Odour: Odourless

#### 15 mL pD2 Buffer

Appearance: Liquid  
pH: 8.8 to 9.2 (Neat, 25 °C)

Colour: Colourless

Odour: Odourless

#### 20 mL pD3 Buffer

Appearance: Liquid  
pH: 4.2 to 4.8 (Neat, 25 °C)

Colour: Colourless

Odour: Acetic

#### 16 mL Wash Buffer A1

Appearance: Liquid  
pH: 6.8 to 7.2 (Neat, 25 °C)

Colour: Colourless

Odour: Odourless

#### 8 mL Wash Buffer A2

Appearance: Liquid  
pH: 7.3 to 7.8 (Neat, 25 °C)

Colour: Colourless

Odour: Odourless

#### 5.5 mL Elution Buffer

Appearance: Liquid  
pH: 8.3 to 8.8 (Neat, 25 °C)

Colour: Colourless

Odour: Odourless

#### 260 µL RNase A

Appearance: Liquid  
pH: Not available

Colour: Pale yellow

Odour: Odourless

### 9.2 Other information

Data for the other parameters of the mixtures are not available, because no registration and no chemical safety report is required.

### 9.3 Relevant Properties of Substance Group

No data available.

## SECTION 10 – STABILITY AND REACTIVITY

### 10.1 Reactivity

Data not available.

### 10.2 Chemical stability

Store according to the recommended temperature on the container label.



**10.3 Possibility of hazardous reactions**

Hazardous reaction has not been reported.

**10.4 Conditions to avoid**

Strong heat, direct sunlight, strong oxidizers and strong reducers.

**10.5 Incompatible materials**

Avoid contact with strong acids or alkaline.

**10.6 Hazardous decomposition products**

In the original package, all parts/ all reagents are safely and separately stored. Decompositions are not observed during the expiration period under recommended conditions.

**SECTION 11 – TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects**

Quantitative data on the toxicity of this product are not available.

**SECTION 12 – ECOLOGICAL INFORMATION****12.1 Toxicity**

Data for the substances and mixtures are not available.

**12.2 Persistence and degradability**

Not necessary.

**12.3 Bioaccumulative potential**

Not necessary.

**12.4 Mobility in soil**

Not necessary.

**12.5 Other adverse effects**

No additional data available.

**SECTION 13 – DISPOSAL CONSIDERATIONS****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Normally it is possible to empty small amounts into drains after dilution.

**Contaminated packaging**

Dispose-off as unused product.

**SECTION 14 – TRANSPORT INFORMATION**

Not classified as dangerous in the meaning of transport regulations.

**UN Number**

ADR/RID: -

IMDG: -

IATA-DGR: -

**UN Proper Shipping Name:**

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA-DGR: Not dangerous goods

**Transport Hazard Class(es)**

ADR/RID: -

IMDG: -

IATA-DGR: -

**Packing Group**

ADR/RID: -

IMDG: -

IATA-DGR: -

**Environmental Hazards**

ADR/RID: no

IMDG: marine pollutant: no

IATA-DGR: no

**Special Precaution for Users**

Data not available.

## SECTION 15 – REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

Data not available.

## SECTION 16 – OTHER INFORMATION

**Date of Issue:** 16 May 2025

**Date of Revision:** 16 May 2025

*The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. We shall not be held liable for any damage resulting from handling or from contact with the above product and shall not establish a legally valid contractual relationship.*